

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference E052893-GL	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/IB 03/02703	International filing date (day/month/year) 09/07/2003	(Earliest) Priority Date (day/month/year)
Applicant ISTITUTO CLINICO HUMANITAS		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

3
☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 03/02703

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G06T7/60 G06T7/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G06T

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, IBM-TDB

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	MERCHANT F A ET AL: "Semi-automatic morphological measurements of 2-D and 3-D microvascular images" PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON IMAGE PROCESSING (ICIP) AUSTIN, NOV. 13 - 16, 1994, LOS ALAMITOS, IEEE COMP. SOC. PRESS, US, vol. VOL. 3 CONF. 1, 13 November 1994 (1994-11-13), pages 416-420, XP010146065 ISBN: 0-8186-6952-7	1,4,5, 10,12, 27-30
A	the whole document ----- -/-	2,3,6-9, 11,13-26

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

° Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Date of the actual completion of the international search

30 March 2004

Date of mailing of the international search report

16/04/2004

Name and mailing address of the ISA

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Authorized officer

Herter, J

INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 03/02703

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	HOWARD V ED - BOVIK A C ET AL INTERNATIONAL SOCIETY FOR OPTICAL ENGINEERING: "THE CONFOCAL MICROSCOPE AS A TOOL FOR PROBING 3-D GEOMETRY" BIOMEDICAL IMAGE PROCESSING. SANTA CLARA, FEB. 12 - 13, 1990, PROCEEDINGS OF SPIE, BELLINGHAM, SPIE, US, vol. VOL. 1245, 12 February 1990 (1990-02-12), pages 46-60, XP000167611	1,4,5, 10,27-30
A	the whole document	2,3,6-9, 11-26
X	----- WENDT U ET AL: "On the influence of imaging conditions and algorithms on the quantification of surface topography" J. MICROSC. (UK), JOURNAL OF MICROSCOPY, SEPT. 2002, BLACKWELL SCIENCE, UK, vol. 207, pt.3, 3 September 2002 (2002-09-03), pages 169-179, XP002275203 ISSN: 0022-2720	1,27-30
A	the whole document	2-26
A	----- US 5 162 990 A (ODEYALE CHARLES O ET AL) 10 November 1992 (1992-11-10) abstract; figures 2,3A-3D column 2, line 41 - column 3, line 52	1-30
A	----- KJELL CARLSSON ED - BOVIK A C ET AL INTERNATIONAL SOCIETY FOR OPTICAL ENGINEERING: "3D REPRESENTATION OF MICROSCOPIC SPECIMENS USING CONFOCAL MICROSCOPY AND DIGITAL IMAGE PROCESSING" BIOMEDICAL IMAGE PROCESSING. SANTA CLARA, FEB. 12 - 13, 1990, PROCEEDINGS OF SPIE, BELLINGHAM, SPIE, US, vol. VOL. 1245, 12 February 1990 (1990-02-12), pages 68-80, XP000167612	1-30
A	the whole document	
A	----- SPILIOTIS I M ET AL: "Fast algorithms for basic processing and analysis operations on block-represented binary images" PATTERN RECOGNITION LETTERS, NORTH-HOLLAND PUBL. AMSTERDAM, NL, vol. 17, no. 14, 30 December 1996 (1996-12-30), pages 1437-1450, XP004017159 ISSN: 0167-8655	1-30
	the whole document	
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INTERNATIONAL SEARCH REPORT

International Application No

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	BISOI A K ET AL: "On calculation of fractal dimension of images" PATTERN RECOGNITION LETTERS, NORTH-HOLLAND PUBL. AMSTERDAM, NL, vol. 22, no. 6-7, May 2001 (2001-05), pages 631-637, XP004234804 ISSN: 0167-8655 the whole document	1-30
A	MAJUMDAR S ET AL: "FRACTAL ANALYSIS OF RADIOGRAPHS: ASSESSMENT OF TRABECULAR BONE STRUCTURE AND PREDICTION OF ELASTIC MODULUS AND STRENGTH" MEDICAL PHYSICS, AMERICAN INSTITUTE OF PHYSICS, NEW YORK, US, vol. 26, no. 7, July 1999 (1999-07), pages 1330-1340, XP000906575 ISSN: 0094-2405 the whole document	1-30
A	LLORCA-ISERN N ET AL: "Estimation of three-dimensional connectivity of internal defects in coatings using fractal analysis" J. THERM. SPRAY TECHNOL. (USA), JOURNAL OF THERMAL SPRAY TECHNOLOGY, JUNE 2001, ASM INT, USA, vol. 10, no. 2, June 2001 (2001-06), pages 287-292, XP0009027269 ISSN: 1059-9630 the whole document	1-30
A	WEN-HUNG LIAO ET AL: "Reconstruction of dynamic 3-D structures of biological objects using stereo microscopy" PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON IMAGE PROCESSING (ICIP) AUSTIN, NOV. 13 - 16, 1994, LOS ALAMITOS, IEEE COMP. SOC. PRESS, US, vol. VOL. 3 CONF. 1, 13 November 1994 (1994-11-13), pages 731-735, XP010146368 ISBN: 0-8186-6952-7 the whole document	1-30

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB 03/02703

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5162990	A	10-11-1992	NONE